March 2, 1994

Mr. Jeff Denison
Division of Environmental Protection
Bureau of Waste Management
Capitol Complex
333 W. Nye Lane
Carson City, Nevada 89710

Dear Mr. Denison,

ETICAM is submitting for a variance from classification as a solid waste in accordance with the standards and criteria in 40 CFR 260.31 and 40 CFR 260.33.

ETICAM is located at 2095 Newlands Drive East, Fernley, Nevada. On March 25, 1985 ETICAM (EPA ID# NVD980895338) submitted a Part A and Part B Permit Application to the Nevada Division of Environmental Protection (NDEP) and the EPA. ETICAM received a RCRA hazardous waste facility permit, number NEVHW001, issued by NDEP, for treatment and storage of metallic wastes for metal recovery on December 24, 1986. ETICAM's treatment and reclamation process produces metal bearing concentrates and other products that are recycled to metallurgical industry. Metals that are reclaimed include silver, gold, copper, nickel, cobalt, iron, zinc, lead, chromium and cadmium.

ETICAM is requesting a variance for the metallic bearing materials that are produced and generated at the Fernley facility from being classified as a solid waste.

The metal bearing material that ETICAM produces is a trivalent chromium hydroxide sludge (filtercake) that is destined for recycling, rather than a material destined for disposal.

(1) We consider the material to be very similar to an ore which is refined at a primary smelter. Currently, the material is acceptable to two different smelters, in which each smelter has their own specifications for the ingredients that are necessary in the feedstock for the smelter's primary production process for recovering the metal. The material to be shipped by ETICAM exceeds the

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smelters' cutoff point for smelting ore into their furnace. The metal bearing material that ETICAM produces contain various metal concentrations as a result of our proprietary hydrometallurgical process, source reduction, and blending techniques. At this point we feel that ETICAM's metal bearing material can be classified as a commercial product in the sense that ores are considered a product.

ETICAM sent a letter to the Office of Waste Programs Enforcement in Washington D.C., on February 22, 1994 for notification of intent to export in accordance with 40 CFR 262.53. ETICAM expects a response in 10 - 12 weeks from the EPA for the Acknowledge of Consent. Currently, 40 tons/month are being shipped to the domestic smelter for the recycling of the chromium hydroxide.

Contractual agreements have been arranged with the smelters for the acceptance of our material to be used in their pyrometallurgical process.

(2) There is currently only one domestic smelter that uses chromium hydroxide filtercake as an ingredient in their primary pyrometallurgical process. This particular domestic smelter has a non-acceptance limit for phosphorous content associated with feed materials for the chromium production process. Also, this smelter has a limited production capacity, thereby creating restricted scheduling opportunities. Due to these two limiting items, ETICAM has accumulated the chromium hydroxide filtercake for the last three years without recycling 75 percent of the volume accumulated at the beginning of that year.

To address these constraints for recycling our material, ETICAM formulated a campaign strategy with two distinct objectives:

1. Develop non-domestic smelter outlets that will have greater production capacity and unique metallurgical technology to utilize our material as effective substitute for chromite ore.

2. Develop process chemistry at ETICAM to produce a material that will satisfy smelter specifications.

ETICAM has reached an agreement with a Ferro - Chrome smelter in Western Europe that has the annual capacity of 70,000 tons. This smelter has integrated plasma arc technology into its pyrometallurgical process. This type of technology provides the smelter with the ability to separate zinc and lead impurities, thereby enhancing their recycling process.

Furthermore, ETICAM has developed a hydrometallurgical process that will remove phosphorus from Chromic acid streams. This unique process can be time consuming; however, the process can be applicable in certain situations.

(3) The quantity of material that is on site currently is approximately 350 tons. The amount of material that is expected to be generated is 100 tons per quarter.

(4) The material is packaged in approved DOT containers for shipment off site for recycling. All containers are labeled, marked, sampled, and chemically analyzed so that the material is handled to minimize any loss. The chemical analytical report generated by the laboratory is correlated with the labeled container for the tracking of ETICAM's product. All containers are inspected on the facility inspection log as required in 40 CFR 264.174. The inspector will note the following conditions: stacking of containers, proper labeling, spills, residues associated with containers, aisle ways, housekeeping, container leaks, and overall container condition. The inspection paperwork will indicate a description of the problem, if any, the remedy of that particular problem, and the date that the problem was corrected.

ETICAM will document the following:

a. The date of each shipment and the facility it was sent to.

b. A letter from the receiving facility that the material is used in their process as an ore or other product.

c. The receiving facility or ETICAM have the necessary equipment to do the reclamation.

d. The recycler will provide letters that certain quantities of material were received, the material was recycled, the amount of recovered metal and the amount of metal credits paid to ETICAM.

The recordkeeping for the product is kept on site for a minimum of three years and is available at all reasonable times for inspection, by any officer, employee, or representative of the NDEP who is duly designated by the Regional Administrator. The stated criteria for the handling of the product will ensure the minimization of any loss of material.

(5) The Chromium Hydroxide produced and generated at ETICAM is exclusively (or nearly exclusively) trivalent chromium. The Chromium Hydroxide, which is virtually non-hazardous in the trivalent species, will be packaged and shipped accordingly.

If you have any comments concerning this request, please give myself a call.

Sincerely,

Mickey Lawler

Mickey Lawler
Compliance Manager

cc:ETICAM file
N. Alvarez, NDEP

ETICAM